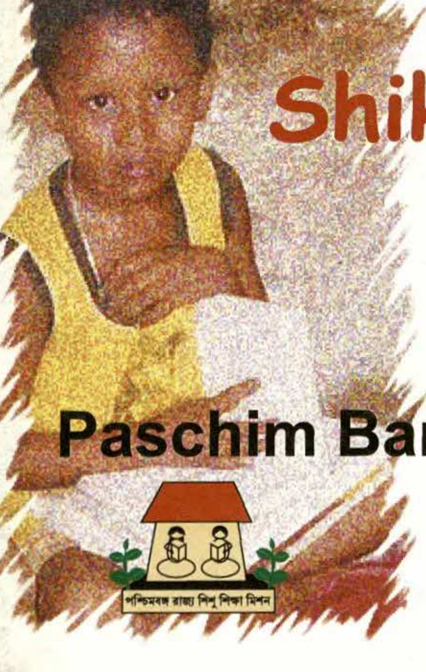
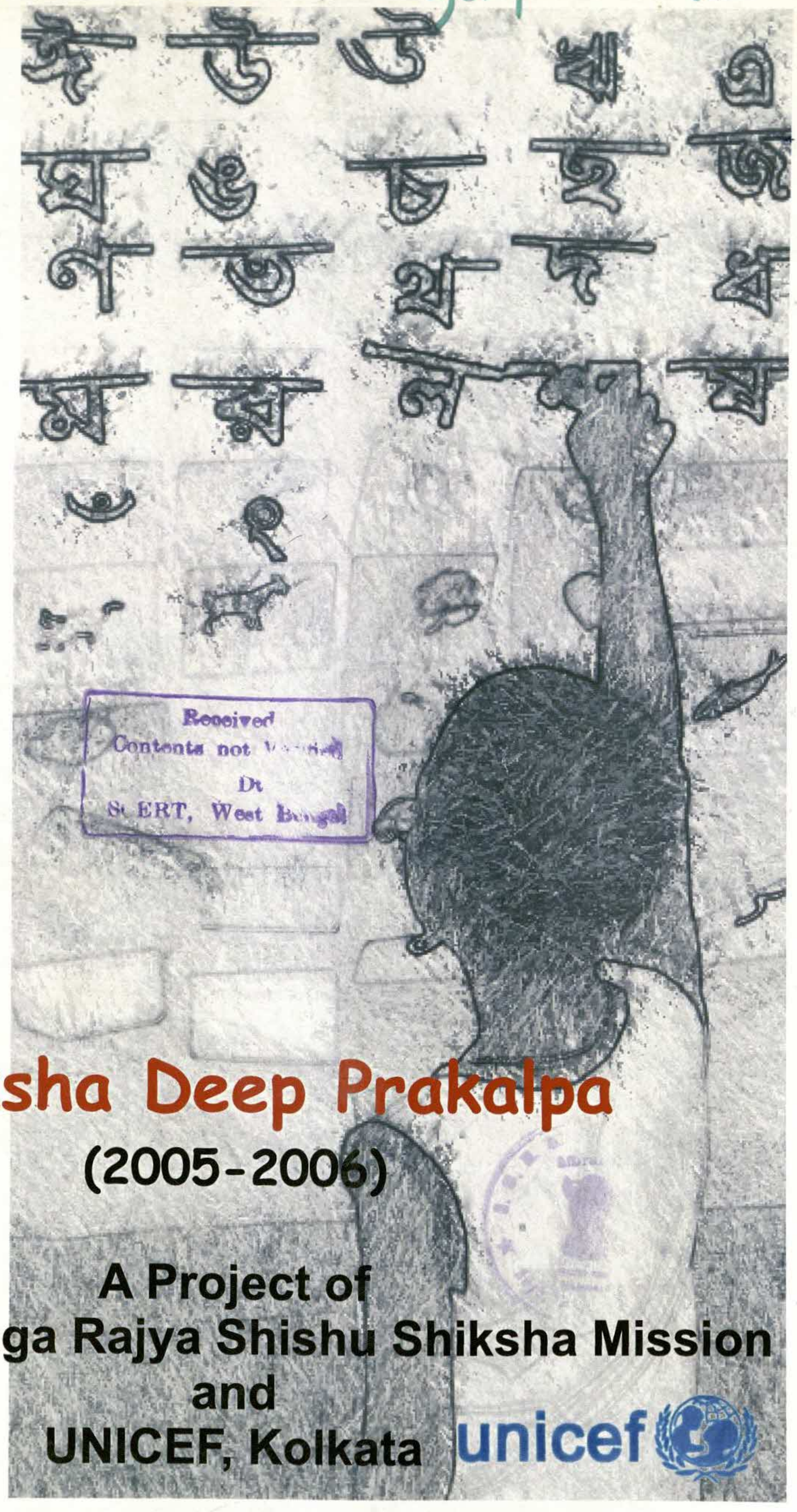
Dr's Ref. Library

302/Gift 3/02





Received
Contents not Verified
Dr
SCERT, West Bengal

Shiksha Deep Prakalpa

(2005-2006)

A Project of
Paschim Banga Rajya Shishu Shiksha Mission
and
UNICEF, Kolkata

Shiksha Deep Prakalpa (2005-06)

A project of Paschim Banga Rajya Shishu Shiksha Mission
&
UNICEF, Kolkata.

Published in : July 2007

Published by : **Paschim Banga Rajya Shishu Shiksha Mission.**
KB-18, Sector - III,
Salt Lake City
Kolkata - 700 098
West Bengal.
Phone - (033) 2335 9985
(033) 2335 9986
email - pbrssm@vsnl.net
pbrssm@rediffmail.com

Designed by : **Akash Mukherjee**

ACC NO - 16280

Digitally printed by : **COMPUTECH**
2118-3010, 9830093698

302/Gift

Shiksha Deep Prakalpa (2005-'06)

An Attempt to Ensure Quality Education in the
Shishu Shiksha Kendras
in
West Bengal

Library

A Project of
Paschim Banga Rajya Shishu Shiksha Mission
Sponsored by
UNICEF, Kolkata

CONTENTS

Chapter 1 : INTRODUCTION Page no- 1
1.1 Context
1.2 Report Objectives
1.3 Plan of Report

Chapter 2 : THE SSK PROGRAMME IN WEST BENGAL Page no- 2

2.1 Introduction
2.2 The basic features of SSKs
2.3 Expansion of the SSK Programme
2.4 The Present Status of the Programme
2.5 The QUALITY issue in SSKs

Chapter 3 : THE SHIKSHA DEEP PROGRAMME Page no- 6
3.1 Brief Context
3.2 Aims & Objectives
3.3 Parameter of selection of SSKs
3.4 Coverage and map

Chapter 4 : Profile of SHIKSHA DEEP SSK Page no-11
4.1 Enrolment
4.2 Sahayikas and their qualifications
4.3 Pupil Teacher Ratio (PTR)
4.4 Physical infrastructure

Chapter 5 : Operational measures Page no-15
5.1 Training and monitoring
    5.1.1 The training of DQMs by State Level Personnel
    5.1.2 Training of the Sahayikas
5.2 Arranging the Gramsabha

Chapter 6 : IMPROVING THE QUALITY OF LEARNING Page no-18
6.1 Introduction
6.2 Baseline Evaluation
6.3 Remedial Teaching
6.4 Preventive Teaching
6.5 Group Learning
6.6 Reading guarantee Programme (RGP)
6.7 Use of Work card / Work Book

Library

Chapter 7: MEASURING THE CHANGES **Page no- 23**
7.1 The Learning output of the learners
    7.1.1 Strategy for evaluation
    7.1.2 The Structure of the tests
    7.1.3 The Impact-I study
7.2 Attendance

Chapter 8: ANALYSING THE EVALUATION RESULTS **Page no- 28**

8.1 Strategy of Analysis
8.2 The Baseline Survey result (1st Terminal Evaluation)
8.3 The Impact Analysis result (3rd Terminal Evaluation)
8.4 Comparison of Baseline (1st Term) & Impact (3rd term) results
    8.4.1 District wise comparison
    8.4.2 Comparison by competency levels
        8.4.2.1 In Bengali
        8.4.2.2 In Mathematics
    8.4.3 Comparison with non Shiksha Deep SSKs

Chapter 9: THE CONCLUSION **Page no-37**

ANNEXURE

(i) List of Abbreviations used.
(ii) Guideline for analysis of mulyan data -
    Evaluation : Baseline (1st term evaluation)
(iii) Guideline for analysis of mulyan data -
    Evaluation : Impact Analysis (3rd term evaluation)

LIST OF TABLES

Table 2.1: Basic Statistics of SSKs in West Bengal
Table 3.1: Distribution of Shiksha Deep SSKs in Districts
Table 7.1 : Competency level in Bengali (in std I&II, in Baseline & 3rd Term evaluatio
Table7.2 : Competency level in Mathematics(in std I&II, in Baseline & 3rd Term evalua n)
Table7.3 : Attendance in Shiksha Deep SSKs
Table 8.1: Competencies of Bengali in std-I & II
Table 8.2: Change in competency wise achievement in Mathematics Scores (%)
Table 8.3: Comparison of Human & Physical resources in Shiksha Deep & non Shiksha D ep SSKs (in terms of state average of %-age value)

LIST OF MAP/CHARTS

Map 3.1: Blocks under Shiksha Deep in Districts
Chart 4.1 : District wise gender wise enrolment in std- I in Shiksha Deep SSKs
Chart 4.2: District wise gender wise enrolment in std- II in Shiksha Deep SSKs
Chart 4.3: Sahayika per School in Shiksha Deep SSKs (district wise)
Chart 4.4: Academic Qualification of Sahayikas in Shiksha Deep SSKs
Chart 4.5: Pupil Teacher Ratio in Shiksha Deep SSKs (District wise)
Chart 4.6: Type of Buildings in Shiksha Deep SSKs
Chart 4.7: Drinking Water Facilities in Shiksha Deep SSKs
Chart 4.8: Toilet Facilities in Shiksha Deep SSKs
Chart 7.1: Month wise attendance level in Shiksha Deep SSKs
Chart 8.1: State Average of obtained percentage in Baseline Survey
Chart 8.2: District wise competency achievement percentage in Bengali & Mathematics for standard-I as per Baseline Evaluation
Chart 8.3: District wise competency achievement percentage in Bengali & Mathematics for standard-II as per Baseline Evaluation
Chart 8.4: State Average of obtained Percentage in Impact Analysis
Chart 8.5: District wise obtained percentage of competencies in Bengali & Mathematics of standard-I in Impact Analysis
Chart 8.6: District wise obtained percentage of competencies in Bengali & Mathematics of standard-II in Impact Analysis
Chart 8.7: Comparison between the Baseline vs Impact (State average of obtained percentage)
Chart 8.8: District wise performance in Baseline and Impact
Chart 8.9: Increase of State Average of obtained percentage in std-I&II, Bengali
Chart 8.10: Comparison of the State average of obtained percentage in 3rd term evaluation in Shiksha Deep & non Shiksha Deep SSKs

CHAPTER 1
INTRODUCTION

1.1 Context

In the academic year 2004-05, the Paschim Banga Rajya Shishu Shiksha Mission, with support from UNICEF, initiated "Shiksha Deep", a programme meant for improving learning of the children of the Shishu Shiksha Kendras (SSKs). It was decided that this would be done by upgrading the quality of human resources as well as by modifying the teaching learning processes in the SSKs. PBRSSM initially launched the programme in 610 model SSKs, but after taking into the positive and negative experiences, the programme was re-planned in 2005-06 to cover 495 SSKs.

1.2 Report Objectives

This report presents an overview of Shiksha Deep Prakalpa; its background, basic features, various components as well as the successes achieved and problems faced in implementation in respect of the improvement in learning output over the academic year 2005-06. The objective of this report is to evaluate the effectiveness of the various quality improvement techniques in enhancing learning achievement in the SSKs. Such periodic evaluations, particularly at the early stages, are essential to increase the effectiveness of the programme and eventually to widen its scope to cover the 16000+ SSKs in the state.

To achieve this objective, the report incorporates material from three sources:

1. Primary Source : Reports of State Quality Managers (SQMs) and District Quality Managers (DQMs) involved with the operation of Shiksha Deep during 2005-06,
2. Secondary Sources: Reports on SSKs as well as the write-ups on the Shiksha Deep prakalpa,
3. Quantitative Data: Reports on the physical and human resources of the Shiksha Deep SSKs from DISE (2005-06), and reports on various evaluations on learning achievement, done in the SSKs, as a part of the Shiksha Deep prakalpa.

1.3 Plan of Report

Chapters 2 and 3 deal with the brief overview of the Shishu Shiksha Kendras and the Shiksha Deep Programme in West Bengal respectively. Chapter 4 analyses the present status of the physical and human resources of the SSKs selected for the Shiksha Deep Programme. Chapter 5 describes the initiatives to upgrade the quality of human resources, while chapter 6 discusses the proposed improvements in the learning techniques. Chapter7 studies the evaluation mechanism that is integral to Shiksha Deep Prakalpa and also assesses the actual improvements in learning measured through various evaluation programmes. Chapter 8 concludes the entire study.

CHAPTER 2
THE SSK PROGRAMME IN WEST BENGAL

2.1 Introduction

There exist more than 52 thousand Primary Schools in West Bengal. In spite of this, it was felt inadequate in the mid-nineties, when there was a surge in demand for education. It was seen that many children, above 5 years remained out of school, primarily because they had no access to any kind of education center. The nearest primary school was either too crowded or the school was at a considerable distance, or there existed some kind of geographical or social barrier. Expansion of formal primary schools in tune with the emerging demand was considered not feasible in the existing circumstances.

In view of the above limitations the need for an alternative system of primary education was thought to be urgently needed. The Shishu Shiksha Karmasuchi emerged in this backdrop. It was the School Education Department which first conceived this alternative system. But keeping in mind that it would be a community-initiated programme, which could better be facilitated by the Panchayati Raj Institutions, the programme was subsequently transferred to Panchayats & Rural Development Department, Government of West Bengal.

Initially it was the State Government's own programme and the financial and administrative requirements were met out of Panchayats & Rural Development Department's budgetary and administrative resources. UNICEF came forward to provide support in the critical areas with their financial and technical inputs.

After a good deal of deliberation with the Government of India, the programme was linked with SSA as its EGS component in 2002-03. Since 2002-03, precisely from October 2002, major financial support has been flowing from SSA of Government of India through the Paschim Banga Rajya Prarambhik Shiksha Unnayan Sanstha, a registered society set up by the School Education Department and now renamed as Paschim Banga Sarva Shiksha Mission (PBSSM). The P & RD Department created an autonomous body in the name and style of Paschim Banga Rajya Shishu Shiksha Mission with the Hon'ble Chief Minister of West Bengal as its Chairman. A mix of renowned academicians and administrators has been associated with the Mission to run and manage the programme.

2.2 The basic features of SSKs

The features are as follows:

- An SSK may be opened in a mouza/village or habitation, where there are 20 or more children within the age group of 5+ to 8+ years who are unable to access the formal primary school either due to distance (more than 1 km) or due to some kind of geographical or social barrier.
- An SSK may be proposed by the guardians of such out of school children. The proposal should go to the Gram Panchayat in the form of a resolution for approval. The Gram Panchayat is to accord approval within a period of three weeks and send it to the Zilla Parishad for final approval through the respective Panchayat Samities. Any denial of approval at any tier should be communicated to the proposer with reasons.
- The guardians on getting approval should form a Managing Committee consisting of 9 members, 7 of whom should be guardians; one PIE and the local Panchayat member should be a member of the committee. One third of the members should be women.
- The Managing Committee should decide about the location and functioning time of the Shishu Shiksha Kendra. It should mobilize local Panchayat resources to build the infrastructure and select teachers (Sahayika) from among the women of the locality having requisite qualification on annual contract basis. The State Government provides fund to the MCs for running SSKs. Thus the MC is empowered both administratively and financially.
- The academic supervision of the programme has been de-linked from administrative supervision. While the administrative supervision of the program is done by the institution of the DM and Zilla Parishads and Panchayat Samities, for academic supervision a cadre of Academic Supervisors (AS) has been raised. Each AS has 20 SSKs in his/her charge.

2.3 Expansion of the SSK Programme

With the launch of the programme in 1997-98 the target was to establish 1000 Shishu Shiksha Kendra (SSK) s across the state. However, in order to make the programme demand driven, rather than target oriented, from 1998-99 onwards more emphasis was given on the demand from below rather than a target from the state. The academic year wise expansion of the program is given below:

Table 2.1: Basic Statistics of SSKs in West Bengal

Academic Year	No of SSKs	No of Sahayikas	No of Learners
1997-98	410	786	30169
1998-99	839	1616	59735
1999-2000	3116	5966	202549
2000-01	7802	14801	503688
2001-02	10871	21499	749119
2002-03	13496	31007	755448
2003-04	16403	39530	1043441
2004-05	16100	38326	1252450
2005-06	16117	41995	1429156

2.4 The Present Status of the Programme

- The Karmasuchi was launched in the state in the academic year 1997-98. Now, there are 16117 Shishu Shiksha Kendras running with 41995 no of Sahayikas and with 1429156 learners in STD-I to IV, in the state (as per DISE 2005-06).

- All the Sahayikas have received 5-days residential orientation training on the appropriate methods of pedagogy.

- The learners are performing satisfactorily and are getting admission in the high schools.

- In the academic year 2004-05, 3000 SSKs were selected as the 'Upgraded SSKs' in the districts and were provided with a GoI fund of Rs. 2 lakh each for construction of the SSK building. Another 3000 SSKs were identified as upgraded SSKs in the next academic year.

- The Mission is publishing a newsletter, named 'Sahayika', which contains write ups on various issues related to content of the curriculum & text book, and transactional methodology. The news letter comes out thrice in a year. A radio program, titled 'Sahayikar Asar' is broadcast through AIR, which discusses subject specific issues on teaching methodology. This programme is extremely popular among the Sahayikas, guardians and the general members of the community. The Mission has received more than eight thousand letters from the listeners of this program in the year 2005-06.

- The programme Shishu Shiksha Karmasuchi has gained support of the community during the past years owing to its strong mass base and due to the fact that it is a community initiated and community managed programme.

The Pratichi Trust had conducted a study on the functioning of Primary Schools and SSKs of three districts of West Bengal, namely, Birbhum, Medinipur (undivided), and Purulia, in April 2001. The study was conducted on different parameters related to education, like,

1. Household Parameters - enrolment, dropout, cost of schooling, performance of teacher and child, parent-teacher relation etc.
2. School Parameters - enrolment, attendance, method of teaching, infrastructure, incentives etc.
3. Administrative Parameters-relation with VEC or other administrative tier.

The result of the study was published as the Pratichi (India) Trust Report, Number- 1, in the year 2002. In this report, it was reflected that, except the infrastructure issue, SSKs of the three districts are performing similar or sometimes even better than the primary schools. According to the report "Despite many constrains, SSKs, barring few exceptions, were found to be functioning well" (the Pratichi (India) Trust Report, Number- 1, page no- 35)

2.5 The QUALITY issue in SSKs

After addressing the issue of increasing demand for education in unserved habitations through opening of SSKs, the major challenge for the Mission was to ensure Quality of learning in the SSKs. In the year 2002 a special evaluation was conducted by the Mission in randomly selected SSKs of 16 districts, where the medium of instruction is Bengali. This evaluation was a competency-based evaluation, designed to identify the levels of competencies in different subjects, attained by the learners in different standards.

The result of the Special Evaluation clearly shows that, the competency attainment level of the learners were not satisfactory. Further, the competency achievement level is highly fluctuating across the subjects. Moreover, this evaluation also helped in identifying the 'Hard Spots' in different subjects to work upon and suggested a number of interventions for facilitating the learners in overcoming the hardspots.

While investigating the reasons for the low (<60%) attainment level of the competencies, it was found that the learners were not properly involved in the teaching learning process. Another reason was the traditional mode of teaching learning practiced by the Sahayika; i.e., giving lectures in the class, which was found to be largely ineffective.

A summary result of Std II in the Special Evaluation of Learners Attainment 2002

No. of total answer scripts : 521

Hard Spots found :

In Bengali :
1) writing letters properly
2) spelling
3) yukta barna (conjugant letters)
4) independent reading
5) independent writing

In Mathematics :
1) negotiating place value
2) different mathematical process like addition, substraction, multiplication & division.
3) negotiating real life problems (due to language deficiency)

CHAPTER 3
INTRODUCTION OF THE SHIKSHA DEEP PROGRAMME

3.1 Brief Context

On considering the results of the Special Evaluation it was felt necessary that some initiative should be taken to improve the level of achievement of the learners. The classroom environment of the SSKs is not quite learner friendly. The classroom is still teacher-centric, and there is very minimum space for the learner to speak, ask questions or to do something new. The teacher still feels at ease in delivering lectures to the learners on any subject. Rote learning is still dominant over activity-based learning with understanding.

To bring about a change in the situation of classroom environment and culture, Paschim Banga Rajya Shishu Shiksha Mission (PBRSSM), along with UNICEF, planned a new methodology of teaching learning process where quality was identified as a major concern in the Shishu Shiksha Kendras. SSA supported PBRSSM by sharing the experience of SLIP+ in the formal primary schools to workout a strategy of quality improvement in primary education from the academic year 2004-05. The focus of this new teaching learning methodology was on enhancing the learning achievement level of children. The strategy consists of piloting intensive quality interventions in selected SSKs in every district and using these centers as demonstration-cum-training centers for the Academic Supervisors, Sahayikas and members of managing committees. Operationally it involves building state and district level quality management teams with State

Quality Managers (SQMs) and District Quality Managers (DQMs).

Along with this methodology, some special activities, like Reading Guarantee Programme (RGP), for improving the reading ability of the learners of Std- II, III and IV, Gram Sabha, for betterment of the teacher community relationship and building up of ownership of the community, are also included. The whole package has been named 'Shiksha Deep'. Learning from this intervention will be up scaled in all the 16,000+ SSK centers, in future.

During the first academic year (2004-'05) of implementation, 610 SSKs were taken under the style of Shiksha Deep. In this year the Mission gained a lot of experience. Some positive results regarding the effectiveness of the prakalpa (programme) came into light. In the next academic year (2005-'06), the prakalpa was re-planned in the State Mission by the SQMs in consultation with the Academic Consultants and the administration, keeping in mind the positive and negative experiences. The activities of the prakalpa were started from the 1st September 2005, in 495 Shishu Shiksha Kendras of West Bengal, instead of 610 SSKs.

3.2 Aims & Objectives

The Aims & Objectives of the Shiksha Deep Prakalpa, as identified are as follows :

1. To improve the learning output in STD-I & II, especially in Bengali and Mathematics.
2. To make the child an 'independent reader & writer'.
3. To change the classroom arrangement & classroom culture by encouraging group learning.
4. To convert the teaching learning process from teacher-centric to child-centric.
5. To build the capacity of the Sahayak/Sahayikas for more effective and child friendly classroom instruction system.
6. To make the MC and community in general interested and informed about the activities of the SSK.

3.3 Parameter of selection of SSKs

For implementing Shiksha Deep Prakalpa, it was planned that some SSKs in all the districts have to be selected. The parameters for the selection were as follows:

1) A minimum infrastructure and separate sitting arrangement for each class.
2) Presence of at least three standards.
3) Presence of four or at least three Sahayak/Sahayikas.
4) Enrolment of a good number of learners.
5) An interested and active Managing Committee.
6) Location near to the District HQ.

The districts were asked to select the SSKs following the above parameters and taking suggestions of the District Quality Managers and local administration.

3.4 Coverage and map

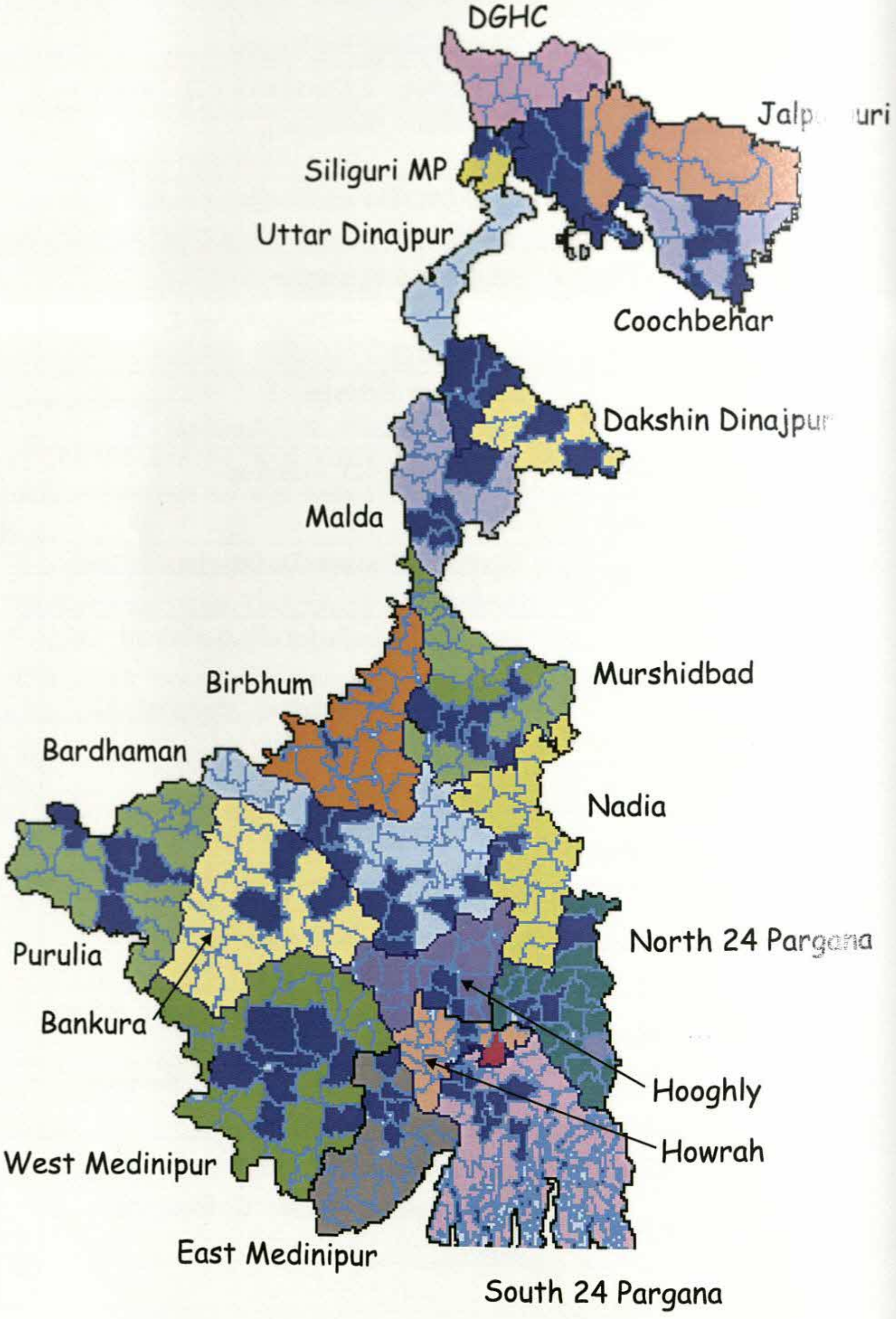
The coverage of the Shiksha Deep Prakalpa is shown in the following map and table. The programme covers all the districts of West Bengal except Kolkata and part of Darjeeling.

However, the number of SSKs selected in different district is not uniform as is shown in the following table. The number of SSKs selected is proportional to the number of DQMs, as each DQM was in charge of 8 SSKs under this prakalpa. A total of 495 SSKs have been covered from the 18 district (taking Siliguri Mahakuma Parishad as an Educational District).

Table 3.1 : Distribution of Shiksha Deep SSKs in the Districts

Sl. No	District	Blocks	Total no of SD-SSKs
1	Siliguri	Naxalbari,Matigara	8
2	Jalpaiguri	Dhupguri,Sadar,Mal,Rajganj	32
3	Coochbehar	Coochbehar - I, Coochbehar - II, Dinhata - II,Haldibari, Mekhliganj, Sitai	40
4	Uttar Dinajpur	Hemtabad, Itahar, Kaliaganj, Raiganj	30
5	Dakshin Dinajpur	Balurghat, Gangarampur	24
6	Malda	English Bazar, Gazole, Kaliachak-I, Kaliachak-II	15
7	Murshidabad	Berhampur, Beldanga - I, Nabagram, Nawda, M-J, Raninagar - I	54
8	Nadia	Krishnanagar - II, Nabadwip	24
9	Birbhum	Suri - II	8
10	North 24 pgs	Barasat -I, Barasat -II, Deganga, Bangaon	30
11	South 24 pgs	Baruipur, Budge Budge - I, D. Harbour -II, Falta, Joynagar-II,Magrahat - I, Magrahat - II Thakurpukur Maheshtala	32
12	Howrah	Domjur, Sankrail	16
13	Hooghly	Chanditala -I, Chanditala - II Haripal	22
14	Bardhaman	Aushgram-II, Kanksa, Galsi, Sadar, Khandakosh, Raina-I, Raina -II, Memari - I, Kalna - I	40
15	Purba Medinipur	Panskura - II, Tamluk -I, Mahishadal, Moyna, Nandakumar	32
16	Paschim Medinipur	Debra, Keshpur, Salboni, Sadar, Jhargram, KGP, Keshiary, Sabang	50
17	Bankura	Onda, Patrasayer, Sonamukhi	14
18	Purulia	Hura, Purulia -I, Purulia - II, Barabazar, Joypur	24
	Total		**495**

Map 3.1 : Blocks under Shiksha Deep Prakalpa in Districts



■ Blocks under Shiksha Deep Prakalpa (2005-06)

পশ্চিমবঙ্গ রাজ্য শিশু শিক্ষা মিশন

CHAPTER 4
PROFILE OF THE SHIKSHA DEEP SSKs

4.1 Enrolment

e Prakalpa covers 55193 learners in four standards. Out of these learners 860 learners are enrolled in STD-I and 13238 in std-II. The enrolment per SSK ies from 58 in Birbhum to over 158 in Malda; the state wise average being und 111. Birbhum, Purulia, Bankura, Hooghly and Coochbehar may be egorized as "low enrolment" districts, with an average enrolment below 100 per K. Malda, North and South 24 Parganas, Siliguri, Murshidabad and Dakshin ajpur may be categorized as "high enrolment" districts with an average ollment over 120 per SSK. The remaining districts, Paschim and Purba dinipur, Barddhaman, Howrah, Nadia, Uttar Dinajpur and Jalpaiguri may be scribed as "medium enrolment" districts with average enrolment of 100-120 per K.

Chart 4.1 : District wise & Gender wise Enrolment in Std-I in Shiksha Deep SSKs

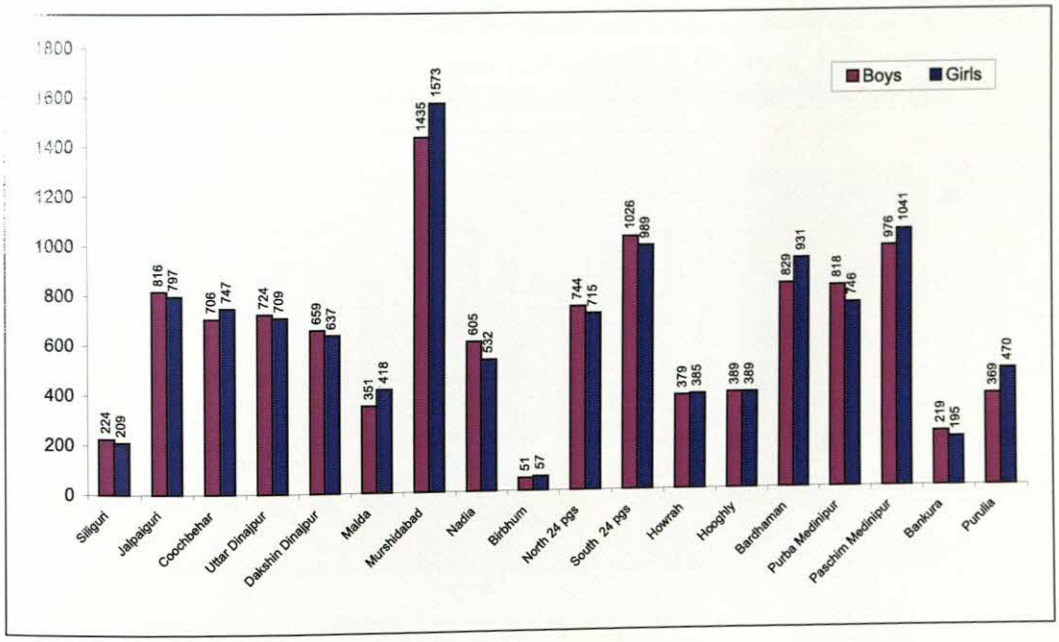
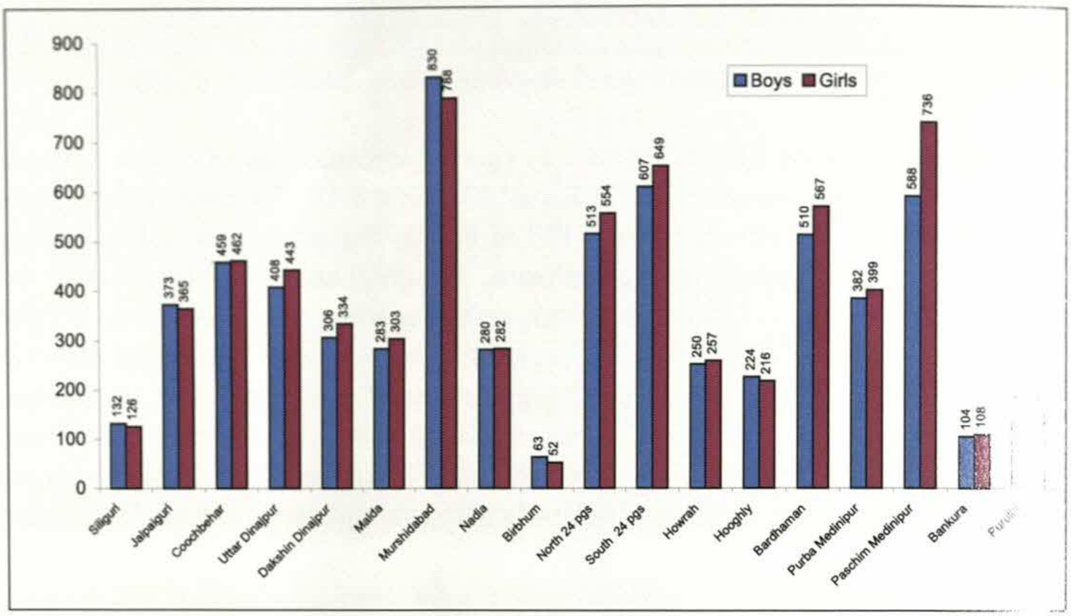


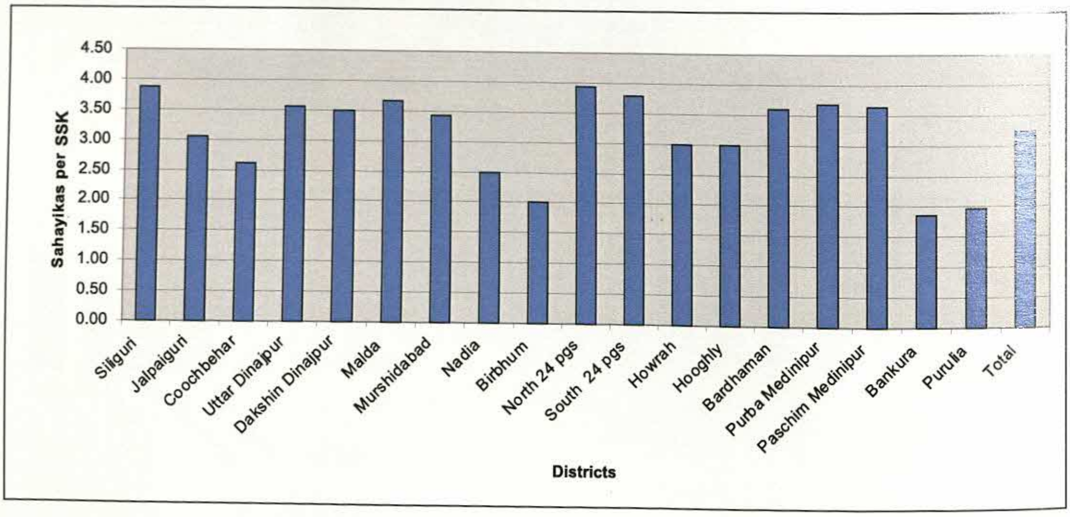
Chart 4.2 : District wise & Gender wise Enrolment in Std-II in Shiksha Deep SSKs



4.2 Sahayikas and their qualifications

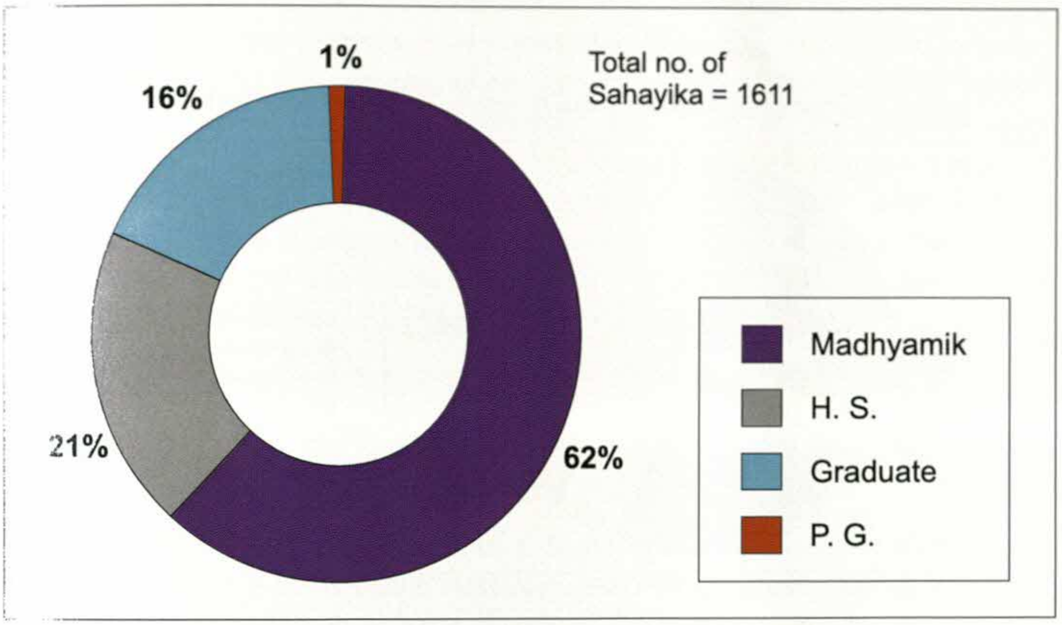
In majority of the districts Shiksha Deep SSKs almost satisfy the norm of having at least four Sahayikas. The average in most districts varies between 3.5 to 4. For three districts namely Coochbehar, Howrah and Hoogly the average for Sahayikas is 3. Birbhum, Bankura and Purulia have 2 or less than 2 Sahayikas on the average.

Chart 4.3 Sahayikas Per SSK in Shiksha Deep SSKs (district wise)



All sahayikas have passed the Madhyamik level and 21% and 16% have completed Higher Secondary and graduation respectively. Only 1% are post-graduate.

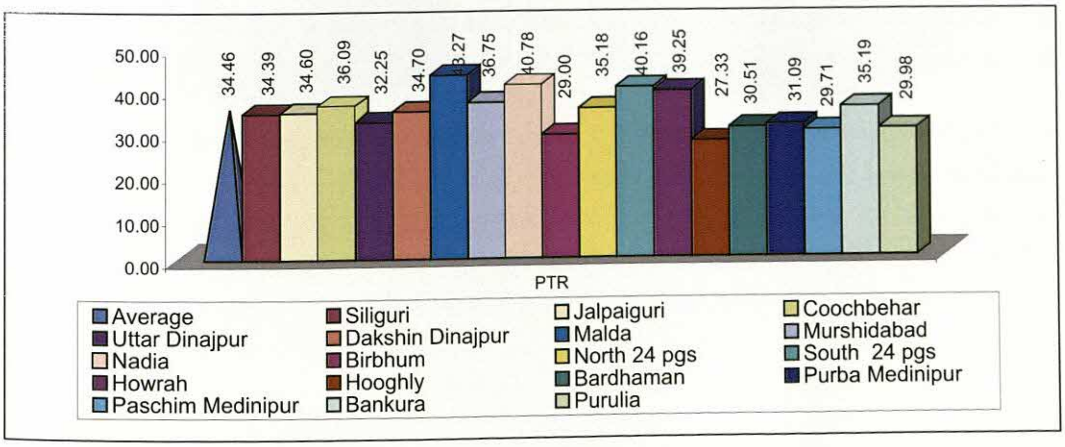
Chart 4.4 Academic Qualification of Sahayikas in Shiksha Deep SSKs



4.3 Pupil Teacher Ratio (PTR)

The PTR has an effect on the learning process. The national norm of PTR is 40:1. In the SSKs selected for Shiksha Deep, the state average of PTR found to be 34:1. In 8 districts across North and South Bengal the average PTR varies between 30 to 35 which is close to ideal. In some districts like Birbhum, Purba and Paschim Medinipur, Hoogly, Bankura, Purulia and Bardhaman, PTR is 30:1 or even less.

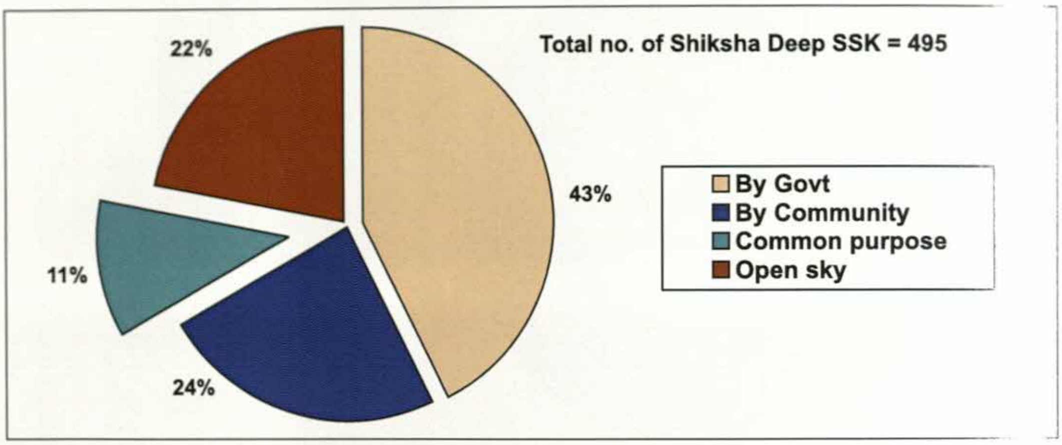
Chart 4.5 Pupil Teacher Ratio in Shiksha Deep SSKs (District wise)



4.4 Physical infrastructure

In the SSKs chosen for Shiksha Deep, it is found that 22% SSKs have no building of their own and run open-air classes. 43% and 24% SSKs have Government sponsored and community sponsored buildings respectively. Another 11% have buildings, which are also used for other purposes.

Chart 4.6 Types of Buildings in Shiksha Deep SSKs



In most Shiksha Deep (73%) SSKs Drinking water is available but the situation with respect to toilet is just the opposite.

Chart 4.7 Drinking Water Facilities in Shiksha Deep SSKs

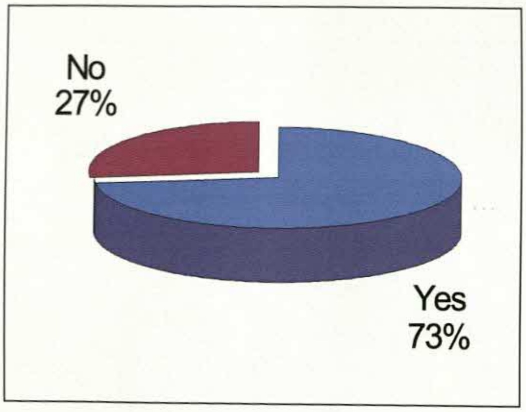
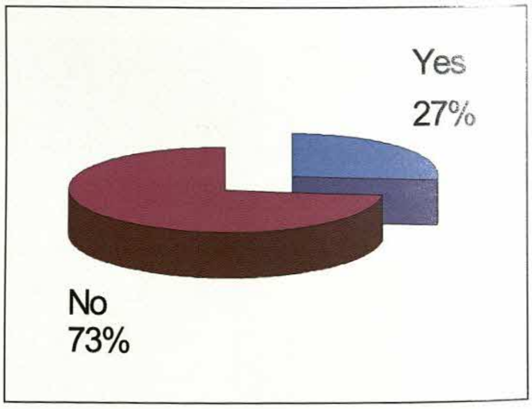


Chart 4.8 Toilet Facilities in Shiksha Deep SSKs



CHAPTER 5:
OPERATIONAL MEASURES

The principal objective of the Shiksha Deep Prakalpa as described in Chapter-III is to enhance the learning achievement of the learners in the SSKs, through intensive quality interventions. This is proposed to be done through introduction of new teaching learning processes and strengthening of the academic support system. For doing this logically planning was done at the Mission level. Operationally, the programme starts with building of quality management teams at the State as well as the district level, comprising State Quality Managers (SQMs) and District Quality Managers (DQMs), who will provide assistance in the form of academic support and monitoring and also work as an Action Researcher so as to determine the effectiveness of the strategies adopted. The steps are as follows :

5.1 Training and monitoring

5.1.1 The training of the DQMs by State Level Personnel

The programme requires a system of 6 State Quality Managers (SQM) at the state level in charge of three districts each and District Quality Managers (DQM) at the district level, each to be in charge of 8 Shishu Shiksha Kendras. As the District Quality Managers are the key persons who will support the activities related to this programme, it was necessary to build up their capacity on the philosophy and implementation strategy of the programme.

A three-day workshop with the DQMs on the philosophy and activities of Shiksha Deep, was conducted by the Mission personnel at Motor Binoy Trust, Hatsimul, Burdwan, from 30.07.05 to 02.08.05 The main agenda of this workshop was to look back for identifying the positive and negative experiences and to plan the programme for the next year. Implementation strategies of the major components of Shiksha Deep, the annual calendar of activities were also formulated on the basis of past experiences.

The state level monitoring meetings were held after every 3 to 4 months, taking districts in clusters, for discussing the status and problem of Shiksha Deep in the field. Three monitoring meetings were conducted with the DQMs in the month of December-January from 01.12.05 to 02.12.05, at MBT, Burdwan and from 12.01.06 to 13.01.06 and from 15.01.06 to 16.01.06 at ILGUS, Salt Lake, Kolkata.

At the grass root level, the DQMs are to sit with the concerned Sahayikas at least once in a month for a discussion on three major issues, first, experiences and problems of transacting the competencies of various subjects in the previous month, second, planning of the competencies to be transacted in the next month, and third, preparing TLMs including work cards for the purpose.

Training programme for the Sahayikas of the selected SSKs were held at district/block level. The DQMs in charge were the coordinators and resource persons for these training programmes. All the training venues were supervised by SQMs.

5.1.2 Training of the Sahayikas

As per the schedule, the DQMs organized a 3 day training programme with the Sahayikas of the selected SSKs in their respective blocks. These trainings were held at the block / district level under the direct control and supervision of the DQMs in the third week of August 2005. In almost all the districts, the representatives from different tiers of administration took interest and were present at the training venues. The central focus of the training was to orient the Sahayika /Sahayak on the philosophy of the programme and the practices which should be adopted in the classroom to fulfil the objective of the prakalpa.

Dates of Sahayika Trainings in Districts

Sl. No.	District	Date (s) of Sahayika Training
1.	Siliguri	05.09.05 to 07.09.05
2.	Jalpaiguri	26.09.05 to 28.09.05 & 04.10.05 to 07.10.05
3.	Coochbehar	29.08.05 to 31.08.05 & 02.09.05 to 04.09.05
4.	Uttar Dinajpur	27.08.05 to 29.08.05
5.	Dakshin Dinajpur	29.08.05 to 31.08.05
6.	Malda	17.08.05 to 19.08.05
7.	Murshidabad	29.08.05 to 05.09.05
8.	Nadia	17.08.05 to 19.08.05 & 23.08.05 to 25.08.05
9.	Birbhum	30.08.05 to 01.09.05
10.	North 24 Pgs.	23.08.05 to 25.08.05
11.	South 24 Pgs.	16.08.05 to 19.08.05
12.	Howrah	24.08.05 to 26.08.05
13.	Hooghly	17.08.05 to 19.08.05
14.	Bardhaman	30.08.05 to 03.09.05 & 05.09.05 to 10.09.05
15.	Purba Medinipur	18.08.05 to 27.08.05
16.	Paschim Medinipur	16.08.05 to 24.08.05
17.	Bankura	24.08.05 to 26.08.05 & 29.08.05 to 31.08.05
18.	Purulia	01.09.05 to 03.09.05

The Sahayikas were trained on the following issues :

1. Baseline - Its importance, process and usage.
2. Process of identifying the learners having weaknesses in their competency achievement.
3. Process of providing Remedial Teaching to the slow learners of STD-II.
4. Process of providing Preventive Teaching to the learners of STD-I, so that no weakness in achieving competencies may occur.

   Process of practicing whole class teaching, organising structured peer learning and individual learning in the classroom.

   Process of preparing work cards for every unit of every subject (especially Mathematics and Bengali in Std. I and II) and their utilization.

   Process of keeping records of various activities.

5.3 Arranging the Gramsabha

Organizing 'Gramsabha' with the parents and guardians at regular interval is extremely important for the success of the Shiksha Deep Prakalpa. Sometimes the Parents and guardians are too busy for earning a living, and are either not interested in the school activities or are not given scope to do so. The lack of support from the family also creates problem in the school activities. On many occasions any new methodology of teaching learning is looked upon critically by the guardians if the purpose and scope of the methodology is not shared with them.

To overcome this situation , it was decided that a general meeting with the guardians/parents to discuss about various issues and components of the prakalpa should be held. This meeting was named as 'Gramsabha', and it was decided that such 'Gramsabha' was to be conducted in every SSK selected for Shiksha Deep.

The 'Gramsabha' received an enormous response from the guardians. In almost all the occasions, hundreds of villagers including all types of people attended the meetings. Representatives from all the three tiers of PRIs took active part in such 'Gramsabha'. In these meetings many people extended their support in terms of cash or kind or positive suggestions for the betterment of the SSK.

> " Guardians as well as the common people have understood the significance of quality improvement in education through the Shiksha Deep programme. The programme has injected a sense of responsibility among different layers of the community and a genuine enthusiasm has been created for making the programme a success. However more help and cooperation of the district and block authorities are required to conduct such community meetings.." (DQM Nadia)

CHAPTER 6
IMPROVING THE QUALITY OF LEARNING

6.1 Introduction

The focal point of Shiksha Deep is to conduct action research to improve the quality of learning of the learners of std I & II, as in this formative stage. The foundation of the basic competencies are laid, which, in turn help the learner to achieve higher level of competencies in literacy and numarecy skills. The process of improving the quality of learning has some sub processes. Majority of these sub processes were applied mainly in std I & II.

The components of Shiksha Deep Prakalpa are as follows:

1) Baseline Evaluation
2) Remedial Teaching
3) Preventive Teaching
4) Reading Guarantee Programme and
5) Group learning
6) Use of Work sheet/chart/work card/map

6.2 Baseline Evaluation

Before starting any educational intervention, it is necessary to measure the entry point or present competency level of the learners. The Baseline Survey (evaluation) is a measure to identify the present level of the learners in the main competencies of language and arithmetic, at standards under focus. As the prakalpa was started in the month of September 2005, the first term evaluation in std I & II, of the academic year 2005-06 was treated as the Baseline data. The baseline survey was conducted by a competency based question paper prepared by the State Quality Managers. The DQMs explained the question papers and the seating arrangement to the Sahayikas who conducted the tests, in most cases, in the presence of the DQM in charge. The grading of the papers and a chart to identify the learners having weaknesses in the two subjects was prepared by the Sahayikas on the basis of the survey results in early September 2005.

6.3 Remedial Teaching

Remedial teaching is a short-term teaching-learning method for bridging up the gaps between desired competencies and actually acquired competencies for a given standard.

As Shiksha Deep was rolled at the beginning of the second term, it was decided that, the remedial teaching should be given to the learners of std I and II, to overcome the weakness in competencies in the first term and the same for the previous academic year. It was decided that time for this teaching should not exceed two months. After completion of remedial teaching, the normal syllabus of standard- I and II was followed.

Once baseline is determined, the next step was to identify the learners who remained weak in acquiring the desired competencies, by preparing an achievement chart in class I & II. They were mopped up through remedial teaching in the first two months. In order to ensure that the Sahayikas could properly practice remedial teaching, 3 teaching days in class I and 4 teaching days in class II were allotted in the routine for remedial teaching activities during the period of two months.

The main tool of remedial teaching is called 'group learning'. In it, learners are grouped according to their deficiencies. Their deficiencies are analyzed and work cards; worksheets and workbooks are used accordingly in groups. In some centers Sahayikas took extra classes for remedial teaching with the cooperation from the parents.

However, in some places, remedial teaching could not fully succeed in removing the weaknesses of learners due to irregular attendance and the limited time available for classroom work. As Shiksha Deep started from the second term, parallel implementation of remedial and preventive teaching sometimes created hindrances to the regular advancement of syllabus.

6.4 Preventive Teaching

The competency based method of teaching learning process in which, the lessons are given in such a way that no weakness in desired competencies appear in the learners, is called Preventive Teaching. This methodology was implemented in standard-I for the rest of the academic session, as per the class routine.

Preventive teaching has 3 steps :

- Whole class approach: Here, the Sahayika discusses about the unit or sub-unit to be covered on that day, to the whole class, in simple understandable language and activities. The NTB is mainly used in this step. Charts, maps, illustrative diagrams, models etc. are used as TLM.

(a) Group learning : the learners are segregated in groups of 6 to 9 having a 'leader', who will be an 'advance learner'. The role of the 'leader' is to manage and operate the discussion on the problem given to them. The Work-cards will be used as the TLM for such learning.

(b) Individual learning: after the group activity is completed, learners will solve similar problems in their own Workbook. The Sahayika will correct the Workbooks with the help of the group leader.

6.5 Group Learning

There exists many hurdles in the process of learning of a child. One of the major hardles is the student-teacher relationship. Mostly, it is found that the learners hesitate to ask questions. To overcome this barrier, a concept of co-operative learning was identified for Shiksha Deep (small group activity). Here, the class is broken into small groups of 6-9. The focus of this method is to involve all the learners by a process of discussion on a problem, in their own group. Thus the attention and involvement of the learners are ensured.

Groups may be of two major type a) random & b) competency based.

a) Random Groups - in this type the grouping is done by selecting the learners randomly. This type of grouping is necessary for std-I, as the competency achievement level of all the learners are almost equal. For preventive teaching, this type of grouping was used.

b) Competency Based Groups - such groups are formed after determining the competency achievement level of the learners in a class. Learners having same difficulties in competencies are placed in one group, so that, proper remedial activity in std-II may be taken up.

In both the cases, each group consists of 6-9 learners. Among them, one has to be the 'leader' with greater competency achievement level and some management capacity. The role of 'leader' is to assist the Sahayika so that the classroom activities can be conducted smoothly. In this concept, role of teacher is redefined, from the dictator of classroom to a facilitator of learning. Each group is given a name and the members of a particular group sit and work together until all the members achieve the particular level of competency. The leader along with the group, is changed from time to time so as to provide an opportunity to all.

It was observed that if the children are divided into groups of backward and advanced students the backward groups couldn't complete their work. (DQM, Bardhaman)

Some difficulties were observed in practicing group learning for SSKs due to inadequate sitting space. In some SSKs, due to large number of learners in classes I and II, it was difficult for the Sahayikas to monitor each group effectively. Another problem was the irregular attendance of students. This was more frequent amongst the learners of class I. Due to this many groups had to be reconstituted and many students lagged behind. The advanced groups were given additional problems, after they completed their first task, so as to keep them engaged. Other groups did finished their first assignment in the meanwhile. However, group learning did help the students to comprehend their lessons properly despite initial problems in group formation.

> Initially in group learning the relatively advanced learners used to fill up the worksheets or workcards instead of encouraging the fellow learners to do it. The Sahayikas could not prevent it. Besides it was observed that if the leader was absent the whole group lagged behind. In order to eliminate this problem a system of rotational leadership was introduced. (DQM, N 24 Pgns.)

> It was observed in some SSKs, that the leader, being an advanced learner, was completing the task on his/her own, instead of discussing it with fellow learners. Through discussion with Sahayikas and such leaders, came to know, that only the leader's performance will not be treated as the group's performance; and these showed result.
> (DQM, Dakshin Dinajpur)

6 Reading guarantee Programme (RGP)

For learning, it is very much necessary for the learner to read independently. The learners at lower classes 'learn to read' & then in higher classes they 'read to learn'. In many cases, learners of even standard III or IV are unable to read properly and independently. They have to give so much attention on decoding the words, that they fail to comprehend the text , which in turn adversely affect learning.

Independent reading has two significant characteristics, viz. fluency & accuracy. It is found that the learners show eight types of mistakes (miscues) while reading. These miscues reduce the accuracy level. Again, when they try to be more accurate, they spend more time than is expected on reading accurately and thus fluency is lost.

To overcome the reading weakness of the learners, the Reading Guarantee Programme (RGP) was included in Shiksha Deep Prakalpa for learners of std II-IV. In Reading Guarantee Program, emphasis was given to relate the graphim (written word) and phonem (sound of the letter). The activities of RGP stated from November 2005. The first task in this programme was to identify learners with

16280

difficulty in reading. By December, a miscue analysis was conducted in the SSKs for the purpose. From the result of this analysis, 'good', 'moderate' and 'poor' readers were identified. A number of materials were used to enhance the reading capability. They are :

a) "Swara Chart" (chart of letters with vowel signs):

This chart was used in standard-II, III and IV to enable the learners to relate the written form of letter with their sounds. Some Sahayikas used this chart in std-I also, in 3rd term.

b) Vowel Shifting Cards

This card contains three to four words with vowel sign, shifting in different words in a rhythm.

c) Similar Sound Cards

This card contains three to four words which produces similar sound, when read.

d) 'Yuktakshar' (compound letter) Card - This card contains three to four words with 'Yuktakshar' (compound letter), along with the letters from which it was made.

e) Sahaj Path -

a book with story or poems of easy text.

f) Basal Readers (story books)-

Books with short stories to increase the interest of reading among the learners.

g) Mind Mapping Card

Cards for mind mapping which will facilitate the practice of mind mapping. Using these cards, the learners can express in easier way.

The use of all the material in regular classess has shown significant result. The learners are now more interested in reading.

In the beginning a Sahayika has to conduct practice of the 'swara chart'. Later on, other RGP materials like compound letter cards, similar sound cards, vowel shifting cards etc. were introduced. 3 distinct classes per week were fixed for conducting Reading Guarantee Programme in Shiksha Deep SSKs.

Although, initially the Sahayikas faced a little problem in handling those materials, but later on all the materials were widely accepted as it showed result.

(DQM, West Medinipur)

Children were able to improve their reading ability as a result of the Reading Guarantee programme. They enjoyed their reading using "swara chart" and "basal reader". After the baseline survey of children in classes III and IV, 3 were found to be good readers 4 moderate readers and 15 poor readers. After 1 year the numbers changed to 6, 13 and 7 respectively.

(DQM, Cooch Behar).

6 Use of Work Card / Work Book

Work Card and Work Book have become extremely popular amongst the learners. They feel more interested in attending their classes as they can use these materials. This process has initiated a change in the character of classroom transactions. While using Work Cards as a part of group learning an element of constructive, co-operative, and competitive learning amongst the learners were observed. By using Work Books learners started feeling more confident in self-learning. In most cases children enjoyed group learning through the use of work cards. Learners also used workbooks individually.

In Std I, 1 group consisted of 8-10 children. They took great interest in workbook and worksheet. But if the subjects of the work card were written on the blackboard, it attracted children more. This method also made the Sahayikas feel easy. (DQM, Cooch Behar)

In the training of Sahayikas, the philosophy and methodology of using work cards were discussed. They were asked to prepare the work cards they require for classroom transaction. In most cases, the Sahayikas prepared those cards.

For Shiksha Deep, three workbooks were used. They are 'Pari Likhi Shikhi' for language, 'Eso Anko Kari' for arithmetics and 'Ami o Amar Charpash' for environmental study. These books were supplied with support from UNICEF.

Although, most of the Sahayikas prepared and used work cards, but in some cases, DQMs found that the Sahayikas were incapable of preparing adequate work cards and they needed more training in this respect. Further, the Sahayikas often faced time constraint in synchronizing workbooks with the textbooks within a particular period. The delay and inadequate supply of TLM materials at the Shiksha Deep SSKs in some districts also hampered progress of these SSKs to some extent.

CHAPTER 7
MEASURING THE CHANGES

As the Shiksha Deep prakalpa was designed to bring about some changes in the status and functioning of the SSKs, there was a need to measure the change. In this prakalpa, the three major areas are:

1) the learning output of the learners
2) the attendance of the learners
3) the relation of the community with SSKs

Though it was not possible to collect data on the changes in attitude of the community, but from some study/reports submitted by the SQM and DQMs it was evident that the community was getting interested in the SSKs. For the other two focus area, huge data were collected in standard formats, prepared by the SQMs. The data were computerized and then analyzed. The results found are discussed below:

7.1 The learning output of the learners

7.1.1 Strategy for evaluation

The evaluation process for Shiksha Deep SSKs, designed by the PBRSSM involves the following steps:

1) As the activities of the prakalpa were started in the month of September 2005, the first term evaluation of the academic year was treated as 'Baseline Evaluation'. The Question Papers (QPs) were prepared at the state Mission, by the SQMs. The evaluations of answer papers were done by the Sahayikas in a crossed method. Entire data were computerized and analyzed at the State Mission office to find out the initial achievement level of the learners.
2) To measure the effect of the Remedial Activities, an Intermediate Impact Study was conducted in std-II, for language and mathematics, in 10 SSKs (5 Shiksha Deep & 5 Non Shiksha Deep) of 5 districts, in the month of November 2005. After completion of the said activity, the data was computerized and analyzed to find the impact of remedial activities.
3) In the month of December 2005, the 2nd term evaluation was conducted in all the districts. This time the evaluation tools were prepared by the DQMs at district level. Some of the answer scripts were collected randomly from districts for tracking the advancement in learning achievement of learners.

In April 2006, the 3rd and final term evaluation or Final Impact Study was conducted in the Shiksha Deep SSKs, with the evaluation tool of language and mathematics for STD-I&II, prepared by SQMs at State Mission. The data of the final evaluation was computerized and analyzed to measure the effectiveness of the techniques, prescribed for classroom interactions.

7.1.2 The structure of the tests

In all these evaluations, tests were taken in two subjects - language and arithmatic for Std. I and II. There were usually 10-12 questions in each subject carrying a total of 25 marks. The question papers were competency based. For preparing the tests, first the desired competencies were identified, then, problems were given on these competencies. The first draft was field-tested and necessary changes were made. The distribution of marks between competencies varied as per the standards and also the terms for which the examination was being conducted.

In Bengali(language), four major competency levels have been considered, in both classes and in all the term exams. These are 'Barnastar'(letter level), 'Shabdastar'(word level), 'Bakyastar'(sentence level) and 'Bodhagamyatar star' (comprehension level) . The higher weightage on the higher levels (e.g., sentence level or comprehension) was given in the higher classes as well as in the 3rd term evaluation compared to the Baseline and Impact-1 (although not in the Impact-1 compared to the Baseline).

Table 7.1: Competency levels in Bengali
(in std- I & II & in Baseline and 3rd Term evaluation)

Competency code	Competency Levels
C1	'Barnastar' (letter level)
C2	'Shabadastar' (word level)
C3	'Bakyastar' (sentence level)
C4	'Bodhagamyatar star' (comprehension level)

In Mathematics, on the other hand, not only the distribution of marks but the competencies themselves vary between the different classes and from one term to the next as seen From Table 7.2. This is due to the fact that, with the advancement of the session, the level of competencies also change and becomes higher.

Table 7.2 : Competency levels in Mathematics

Competency code	Standard 1		Standard 2	
	Baseline	3rd Term	Baseline & Impact 1	3rd Term
C1	Long/Short	Concept of Two Digit Numbers	More/Less	Numbers
C2	More/Less	Place Value and Addition	Numbers	Place value
C3	Numbers	Place Value and Substraction	Place value	Addition & Solution to real life problems
C4	Equality Inequality	Three Digit numbers	Addition & Solution to real life problems	Addition & Solution to real life problems
C5		Solution to real life problems	Substraction & Solution to real life problems	Multiplication, Division & solution to real life problems
C6		Currency and zero	Money, day-hour and zero	Money, day-hour and measurement

7.1.3 The Impact-1 Study:

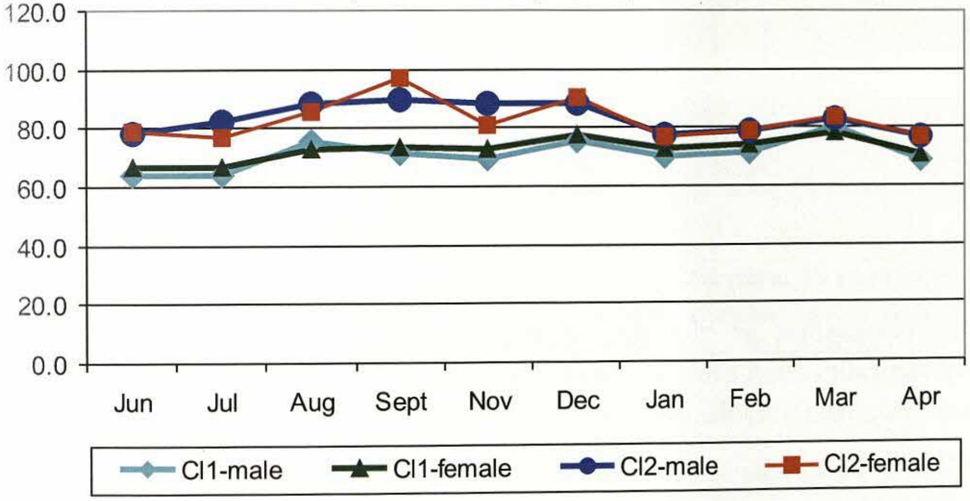
After the completion of Sahayika training, Gramsabha and Baseline Survey remedial activities were started. An intermediate evaluation was conducted in stage II of Shiksha Deep SSKs to determine the effect of remedial activities, for language and mathematics. This study was conducted in 10 SSKs (5 Shiksha Deep and 5 non-Shiksha Deep SSKs) of five districts, viz, Malda, Bankura, Purulia, North 24Parganas and Burdwan. The QP for this evaluation was prepared at the state level.

The result of this evaluation was compared with the Baseline survey result. It was found that in many SSKs the achievement level had increased significantly. In many SSKs however, those was negative impact. This may be due to the reason that the SSKs were not able to complete the Remedial Activity. Another probable reason may be that the learners lost interest during this evaluation, as it was held only a few days after the 2nd term evaluation.

7.2 Attendance

The plan was to collect month wise attendance data from all 495 SSKs under the Shiksha Deep Programme. However attendance data was available for 836 boys and 785 girls of Std I and 592 boys and 603 girls of Std-II, from 10 districts: Siliguri, Jalpaiguri, ,Coochbihar, U. Dinajpur, D. Dinajpur, Burdwa,. Bankura, 24 PGS (S), Midnapur E, 24 PGS (N). The data from SSKs in the other districts were either unavailable due to various problems or were incomplete (all months were not covered) or inconsistent (attendance in some months exceeded total enrolment). The pattern of aggregate statewise (for the 10 districts) attendance in the Shiksha Deep SSKs for boys and girls in classes I and II is shown in Chart 7.1.

Chart 7.1: Month wise attendance levels in Shiksha Deep SSKs
(June'05 to April'06)



It appears from Chart 7.1 that:

Finding1: Overall attendance levels appear to be satisfactory. The attendance levels in Std. II (around 82%) are somewhat higher than in Std. I (around 72%) although there is not much difference between the attendance of boys and girls in the same class. Attendance is highest during September, November and December and lowest in June, July and April. As the prakalpa started from the month of September, the hike in attendance may be a reflection of the increased interest of the learners to the classroom activities. The Gramsabha, for motivating the parents for their children's education may also have some role in this increment, as the attendance of primary learners is somewhat dependent on their guardians' will. However, the seasonal variation in attendance does not appear to be very large.

This is confirmed by the summary statistics on enrolment presented in table 7.3.

Table 7.3
Attendance in Shiksha Deep SSKs

	N	Mean	Std. Deviation
CL1_MALE	10	71.17	5.09
CL1_FEM	10	72.64	3.83
CL2_MALE	10	83.08	5.19
CL2_FEM	10	82.46	6.70

CHAPTER 8
ANALYSING THE EVALUATION RESULTS

8.1 Strategy of analysis

After completion of the evaluations (Baseline & Impact), the results were collected from each Shiksha Deep SSKs in standard formats. As those compiled results reached the Mission, the entire data was computerized and analyzed.

8.2 The Baseline Survey result (1st Terminal Evaluation)

In order to get the State Average marks obtained by the learners, first the district average was calculated. From that, the State Average was calculated. Similar method was adopted to locate achievement of subject wise competencies at the state level. Both the State Averages were converted into percentage value. The Baseline Evaluation shows that State Average is (in % age) 56.24 & 62.61 for Bengali and Arithmetic in std-I and 60.38 & 59.94 for the same subjects in std-II.

The result are shown in Chart 8.1, 8.2 and 8.3.

Chart 8.1 :State Average of obtained % in Baseline Survey

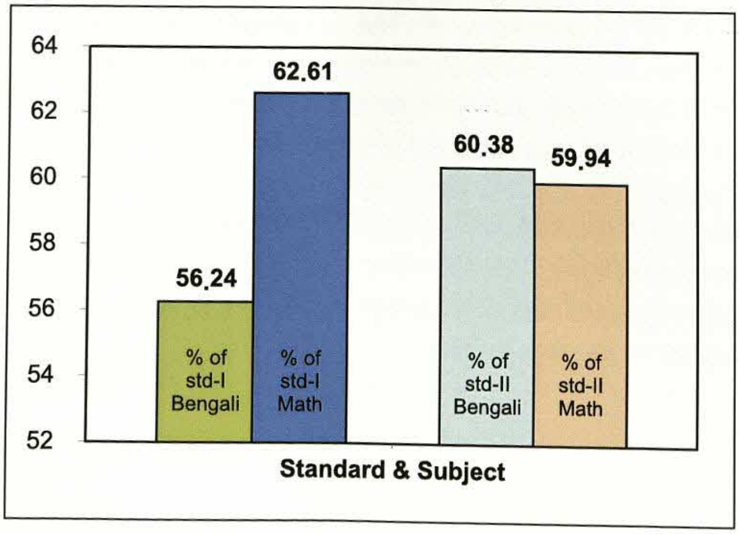


Chart 8.2 : District wise competency achievement percentage in Bengali & Mathematics for standard-I as per Baseline Evaluation

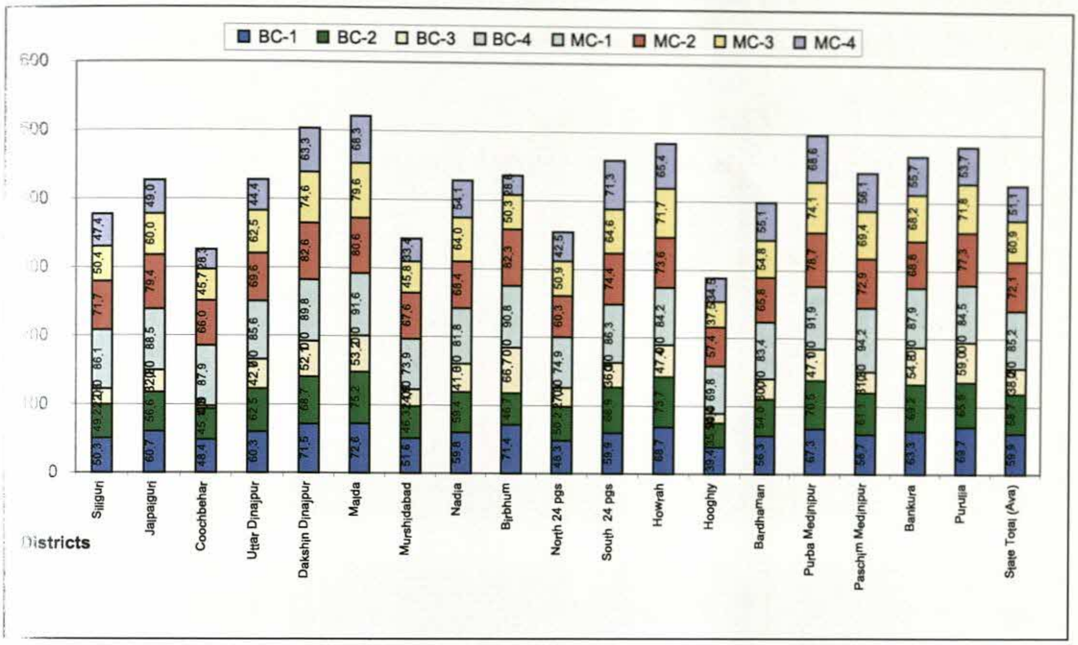
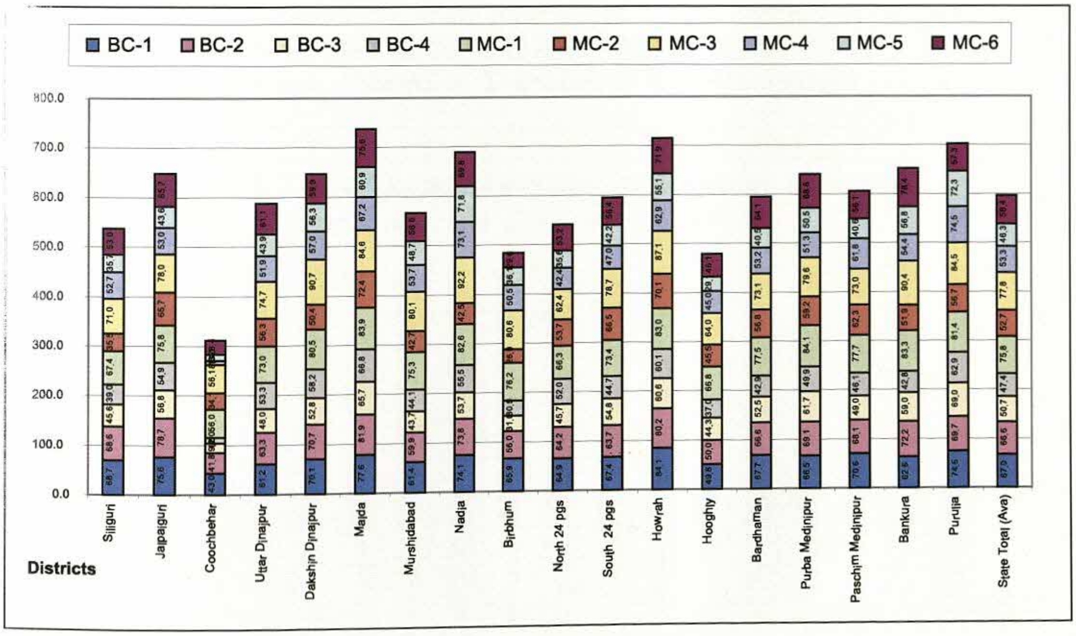


Chart 8.3 : District wise competency achievement percentage in Bengali & Mathematics for standard-II as per Baseline Evaluation



8.3 The Impact Analysis result (3rd Terminal Evaluation)

At the close of academic year 2005-06, the third term evaluation was conducted in the month of April 2006, with the competency based evaluation tools prepared at the state level. In this evaluation, more weightage was given to higher competencies in both the subjects. State average of performance calculated in the manner described in 8.2 is 60.97 & 66.15 and 66.06 & 69.81. As in the competency wise result, the districts show a wide variation.

Chart 8.4 :
State Average ofobtained % in Impact analysis

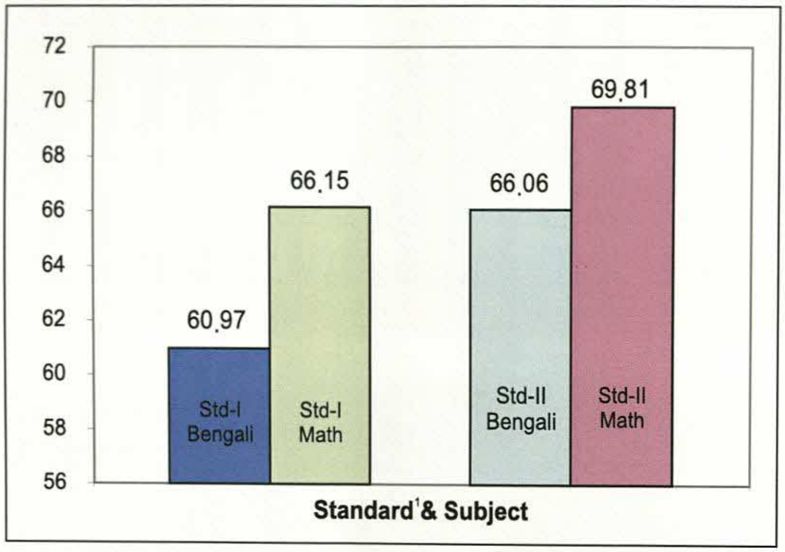


Chart 8.5 : District wise obtained percentage of competencies in Bengali & Mathematics of standard-I in Impact Analysis

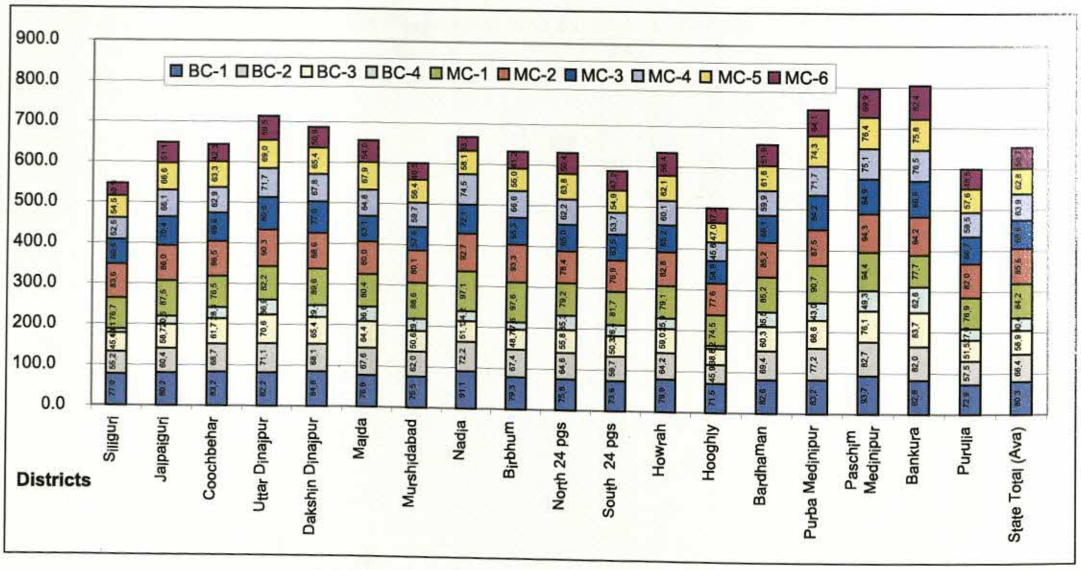
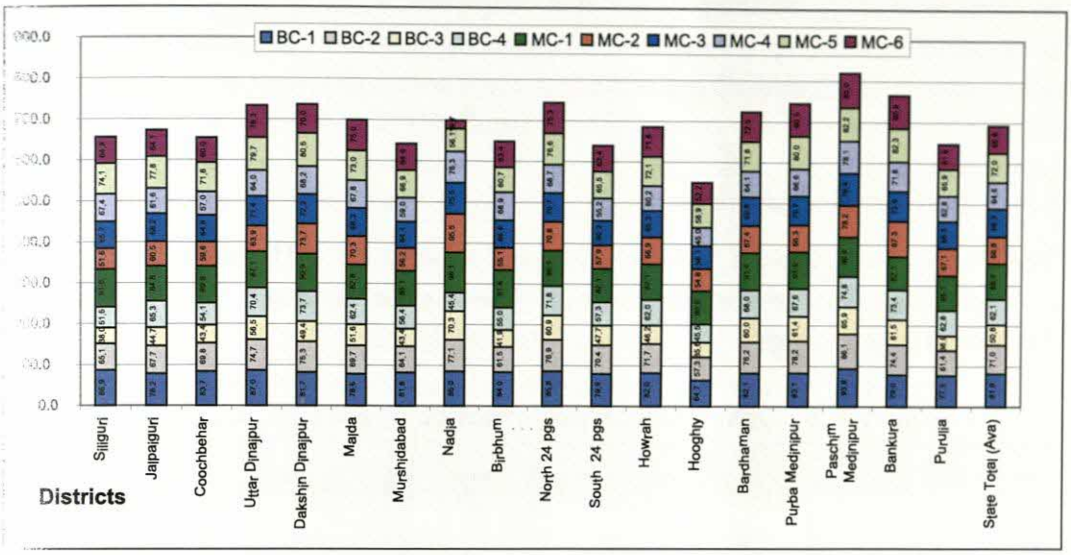


Chart 8.6 : District wise obtained percentage of competencies in Bengali & Mathematics of standard-II in Impact Analysis

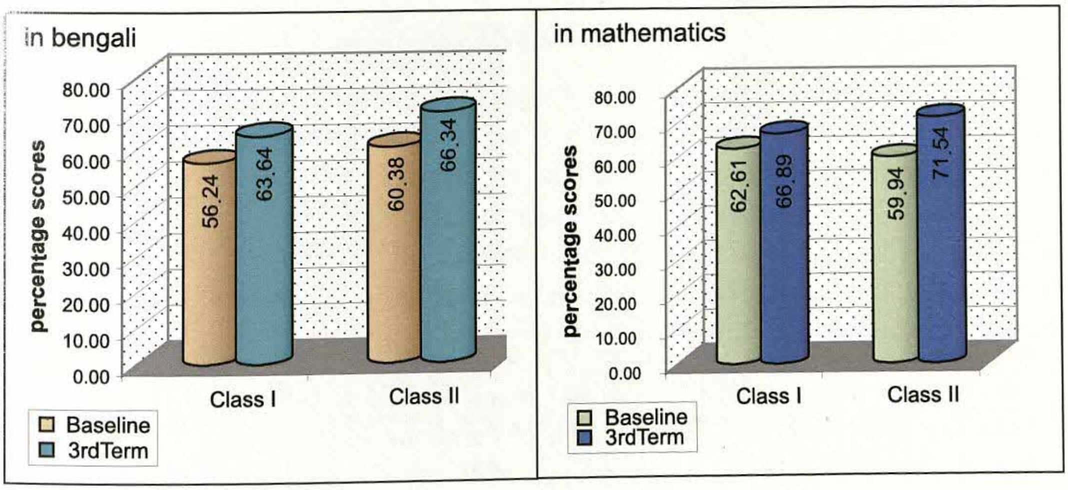


Although the district wise analysis of the competency achievement of learners in Bengali and arithmetic does not say anything about the improvement of a specific learner in those subjects, but still it is useful to compare the performance of the district cell in achieving the goal of Shiksha Deep prakalpa.

8.4 Comparison of Baseline (1st term) & Impact (3rd term) results

On comparison of the results of Baseline Evaluation and that of the Impact Analysis, it was found that the State Average of the percentage of marks obtained in Bengali and Mathematics have improved as shown in Chart 8.7.

Chart 8.7. Comparison between the Baseline vs Impact (State Average obtained percentage)

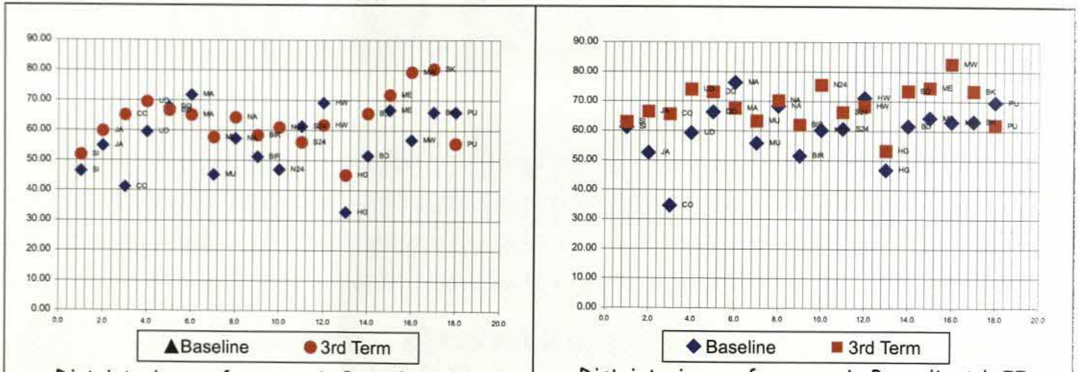


The average score obtained by students was higher in the 3rd term evaluation than in the baseline study. Also, the 3rd term examination was more difficult either due to more weightage on the higher-level competencies or the inclusion of higher competencies. This implies that there has been a distinct improvement in academic attainment in the Shiksha Deep SSKs.

8.4.1 District wise comparison

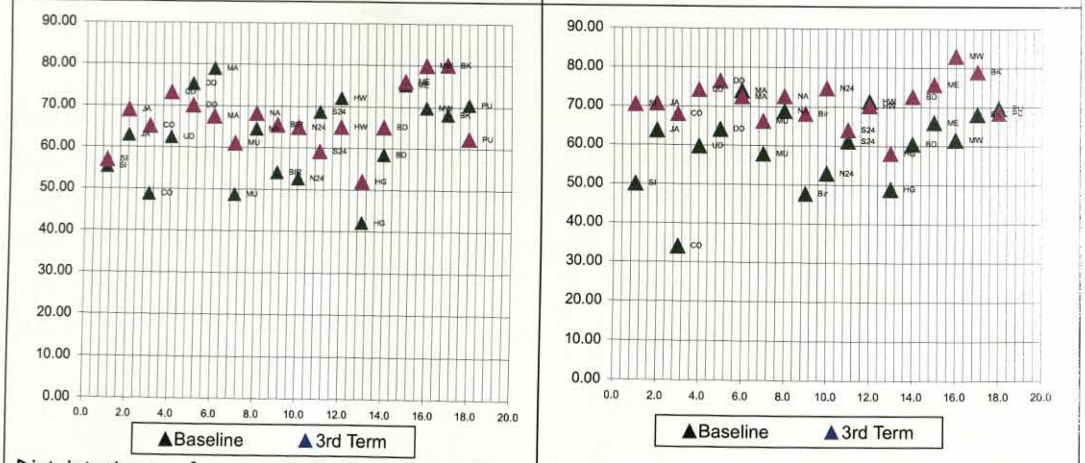
The next comparision is between the performance of different districts. The district-wise scores of the baseline and 3rd term examinations in the Shiksha Deep SSKs are shown in Chart 8.8.

Chart 8.8. District-wise performance in Baseline & Impact



District wise performance in Bengali: std- I

District wise performance in Bengali: std- II



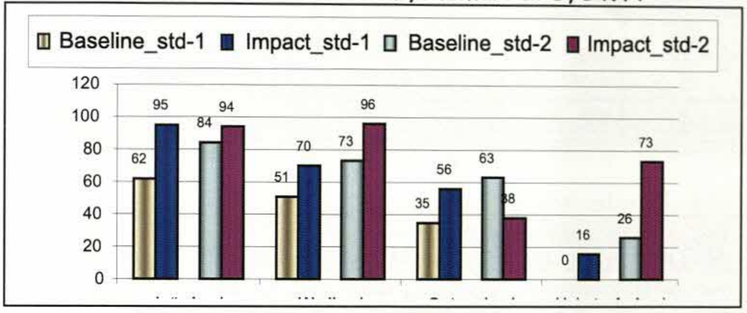
District wise performance in Mathematics: std- I

District wise performance in Mathematics: std-II

Legends : **SI**-Siliguri, **JA**-Jalpaiguri, **CO**-Coochbehar, **UD**- Uttar Dinajpur, **DD**- Dakshin Dinajpur, **MA**-Malda, **MU**-Murshidabad, **NA**- Nadia, **BIR**- Birbhum, **N24** North 24 Parganas , **S24**- South 24 Parganas, **HW**- Howrah, **HG**-Hooghly, **BD**- Barddhaman, **ME** East Medinipur **MW**- West Medinipur, **BK**- Bankura, **PU**- Purulia.

A comparative evaluation of the Baseline and 3rd term examinations shows that average performance has improved in most districts. Moreover, it has gone up (in percentage score) more in the districts like Coochbehar, Murshidabad and Hooghly which were relatively poor performer in the Baseline evaluation. In contrast, the improvement is moderate in the districts like Malda and Howrah that had the best performance in the Baseline. All these are confirmed by the higher mean scores and lower standard deviations in the 3rd term evaluation compared to the Baseline. On the whole we may say that :

Comparison of percentage achievement in Bengali of learners in Shonrah SSK, Memari-IPS, BWN



From report of DQM, Burdwan

Finding 2: The average scores in the 3rd term evaluation have gone up in most districts compared to the Baseline evaluation . Further the improvement has been greater in the relatively backward districts implying that the inter district variation in performance of Shiksha Deep SSKs has also come down in the 3rd term compared to the Baseline .

3.4.2 Comparison by competency levels

Increase in the learning output (i.e subject-wise competency achievement) is the goal of Shiksha Deep interventions. So to measure the increment of the learning output, it is required that the results of Baseline and Impact, be compared in terms of subject-wise competency achieved by the learners. By doing so, it was found that the average of the obtained percentages in different subject-wise competencies in all districts have increased significantly. The only reason attributed to this success is a differential treatment in the classroom which includes components like competency based teaching learning, evaluation & remedial teaching, peer learning using competency based work cards, individual activity using work books, reading guarantee programme & mind mapping.

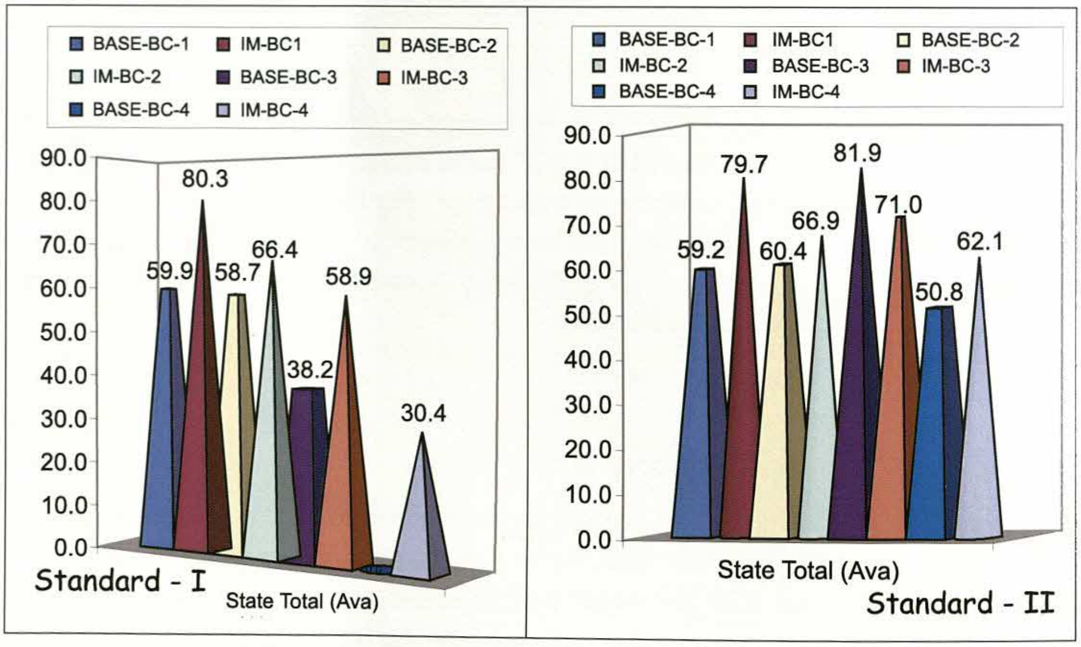
8.4.2.1 In Bengali

In Bengali, for both the standards four major competencies were identified (as shown in Table-8.1), on which question papers in both the evaluation were designed. The increase of the State Average in the four competencies in learners of standard-I and II are shown in Chart 8.9.

Table 8.1 : Competencies of Bengali in Std-I and II

Sl.no	Stage of Competency
1	Barnastar (Letter Level)
2	Sabdastar (Word Level)
3	Bakyastar (Sentence Level)
4	Bodhagamyatar star (Comprehension Level)

Chart 8.9 Increase of State Average of obtained percentage in Std-I & II, Bengali



8.4.2.2 In Mathematics

A competency wise comparison is more difficult for mathematics as most of the competencies differ between the Baseline and 3rd Term evaluations. Still one may compare the scores in the competencies that are common for both evaluations as well as comparing the scores on competencies that are common between the std- I 3rd term evaluation and the std- II Baseline evaluation. This is shown in Table 8.2.

Table 8.2. Change in Competency wise achievement in Mathematics Scores (%)

Baseline	**Std-I**	**Std-II**	**Baseline**
Long-short	84.52	74.94	Two digit numbers
More-less	71.39	54.47	Place value &addition
Number	60.27	76.14	Place value and subtraction
Equality-inequality	51.27	51.52	Three digit number
		44.36	Real world problems
		58.28	Money and &zero
3rd Term	**Std-I**	**Std-II**	**3rd Term**
More-less	85.1	87.82	Numbers
Numbers	84.86	65.43	Place value
Place value	69.66	68.27	Addition & real world problems
Addition & real world problems	64.04	63.74	Subtraction and real world problems
Subtraction & real world problems	63.37	73.44	Multiplication, division and real world problems

Note that scores have improved in the 3rd term evaluation relative to the Baseline in the same competencies. This is true in std- I for Concept of More less and Numbers and for std- II in Numbers, place value, addition and real world problems. The only decline is in subtraction for std- II, although the 3rd term includes real world subtraction problems, which the baseline does not appear to do. In fact the scores in roughly the same competencies appear to be higher in the std- I 3rd term test and the std- II Baseline except for subtraction. Thus we may say that:

Finding 3 : The percentage scores in Bengali have increased for all competencies and in Mathematics for almost all competencies in the 3rd term evaluation compared to the Baseline.

8.4.3 Comparison with non Shiksha Deep SSKs

To establish the findings of the increment of learning achievement, the results were compared with the same from some non Shiksha Deep SSKs. For that purpose 15 non Shiksha Deep SSKs & similar number of Shiksha Deep SSKs were selected from 3 districts using the random number table (Table XXXIII, Random Numbers [VI]). As the evaluation papers of these SSKs were not standardized, the SSK wise average of the obtained percentage value was taken as the comparable parameter. From the said value, the State Average of the obtained percentage value was calculated.

This value, when compared with the same from Shiksha Deep SSKs, a distinct difference was observed. Chart 8.10, showing the difference is given here.

While comparing the results, the human & physical resources of both the Shiksha Deep & Non Shiksha Deep SSKs were compared in terms of state average of percentage, as given below in table 8.3.

Chart 8.10 Comparison of the State Average of obtained percentage in 3rd Term evaluation in Shiksha Deep & non Shiksha Deep SSKs

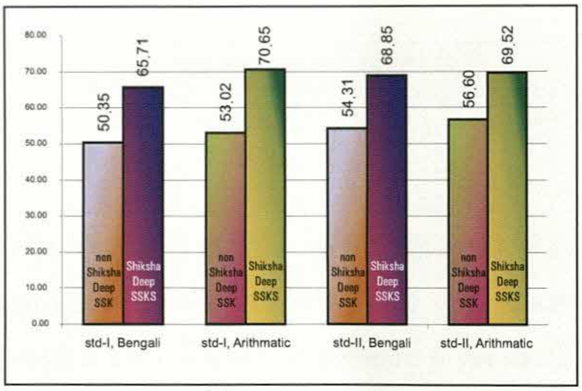


Table 8.3. Comparison of human & physical resources in Shiksha Deep & non Shiksha Deep SSKs (in terms of state average of %age value)

Comparison of human resources

Status	PTR	No of Sahayika / SSK	Academic Qualification of Sahayika (%age Value)			
			MP	HS	G	PG
Shiksha Deep SSKs	41.7	3.2	61.2	22.4	14.3	2.0
Non Shiksha Deep SSKs	31.9	2.9	67.4	16.3	16.3	0.0

Comparison of physical resources

Status	Build Status (%age Value)				Toilet Availability (%age Value)		Drinking water Availability (%age Value)	
	Govt	CoEx	CoCo	Osk	Yes	No	Yes	No
Shiksha Deep SSKs	26.7	20.0	20.0	33.3	36.4	73.3	66.7	33.3
Non Shiksha Deep SSKs	26.7	6.7	26.7	40.0	13.3	86.7	60.0	40.0

CHAPTER 9
CONCLUSION

Action research based intervention for upgrading quality of education in the SSKs for the last two years has yielded same positive experiences. The intervention was initially planned to bring about a change in learning of the children. This change in learning, as observed by the academic experts in the Mission, was not directly proportional to the dose of macro-level teachers training. The structure and culture of the classroom keeping unchanged, no major change in learning can be effected. The Mission therefore formulated strategies for development of basic literacy and numeracy in early classes with structural change and adjustment of the classroom. The objective of the intervention for basic literacy and numeracy was to ensure that no child of the classroom falls back and learning disparity in the classroom reduces substantially. Interventions on this count were the preventive and remedial teaching. Some other interventions were included in the higher classes. Based on present status of primary education in the country, it was thought appropriate to roll on reading guarantee programme in standard II, III, & IV. It is imperative for a learner passing out of primary level of education to be a fluent reader.

All these interventions have shown some positive results. Chart 7.1 shows that the changed classrooms, where the challenge of learning competency is taken not by individuals but by a group of individuals, has experienced better attendances of learners. Chart 8.4 shows the improvement in learning form 61 to 66 in first language and form 66 to 70 in arithmetic. Charts 8.7 also show some improvement.

The Mission cannot claim that the methodology of measuring improvement of learning outcome is free form defects. It is the first attempt on the part of the State Quality Managers to net the changes that have been effected in the field. The reports that have come to the Mission is that small group activity with the help of work cards reduces the learning challenge of the individual learners. Learning takes place from teacher as well as peer source. The learning disparity within the classroom reduces. Reading guarantee programme works well and the learners learn to read fluently within a shot time. Mind mapping, which presently a part of Reading Guarantee Programme, develops skill of writing paragraphs.

Mobilization of local community in monitoring basic discipline of the learners and teachers, providing support from local level on various issues including construction and maintenance of school building have helped the educational institutions to become social institution.

Annexure (i)

Abbreviations used

Abbreviation	Full form
P&RD	Panchayat & Rural Development Department, Govt. of West Bengal
SSK	Shishu Shiksha Karmasuchi
PBRSSM	Paschim Banga Rajya Shishu Shiksha Mission
PBSSM	Paschim Banga Sarba Shiksha Mission
UNICEF	United Nations Children's Fund
SSA	Sarba Shiksha Abhijan
EGS	Education Guarantee Scheme
DM	District Magistrate
SSK	Shishu Shiksha Kendra
SQM	State Quality Manager
DQM	District Quality Manager
AS	Academic Supervisor
PIE	Person Interested in Education
MC	Managing Committee
AIR	All India Radio
SD	Shiksha Deep
NTB	Nationalized Text Book
TLM	Teaching Learning Material
RGP	Reading Guarantee Programme
DISE	District Information System of Education
CL	Competency Level

Guideline for analysis of Mulyan Data

Evaluation : BASELINE (1st Term Evaluation)

Standard-I, Bengali (First Language)	
Competency	Total number given
C1: Barnastar	7
C2: Sabdastar	15
C3: Bakyastar	3
C4: Bodhagamyata	0
Standard-I, Ganit (Arithmetic)	
C1: Lamba-Khator Dharana	2
C2: Kam-Beshir Dharana	3
C3: Sankhyar Dharana	16
C4: Saman-Asamaner Dharana	4
Standard-II, Bengali (First Language)	
C1: Barnastar	7
C2: Sabdastar	11
C3: Bakyastar	3
C4: Bodhagamyata	4
Standard-II, Ganit (Arithmetic)	
C1: Dui anker sankhyar dharana	6
C2: Sthaniya maner dharana saha joger dharana	6
C3: Sthaniya maner dharana saha bioger dharana	2
C4: Tin anker sankhyar dharana	2
C5: Bastab samasyar samadhan	5
C6: Taka-paisa o shunyer dharana	4

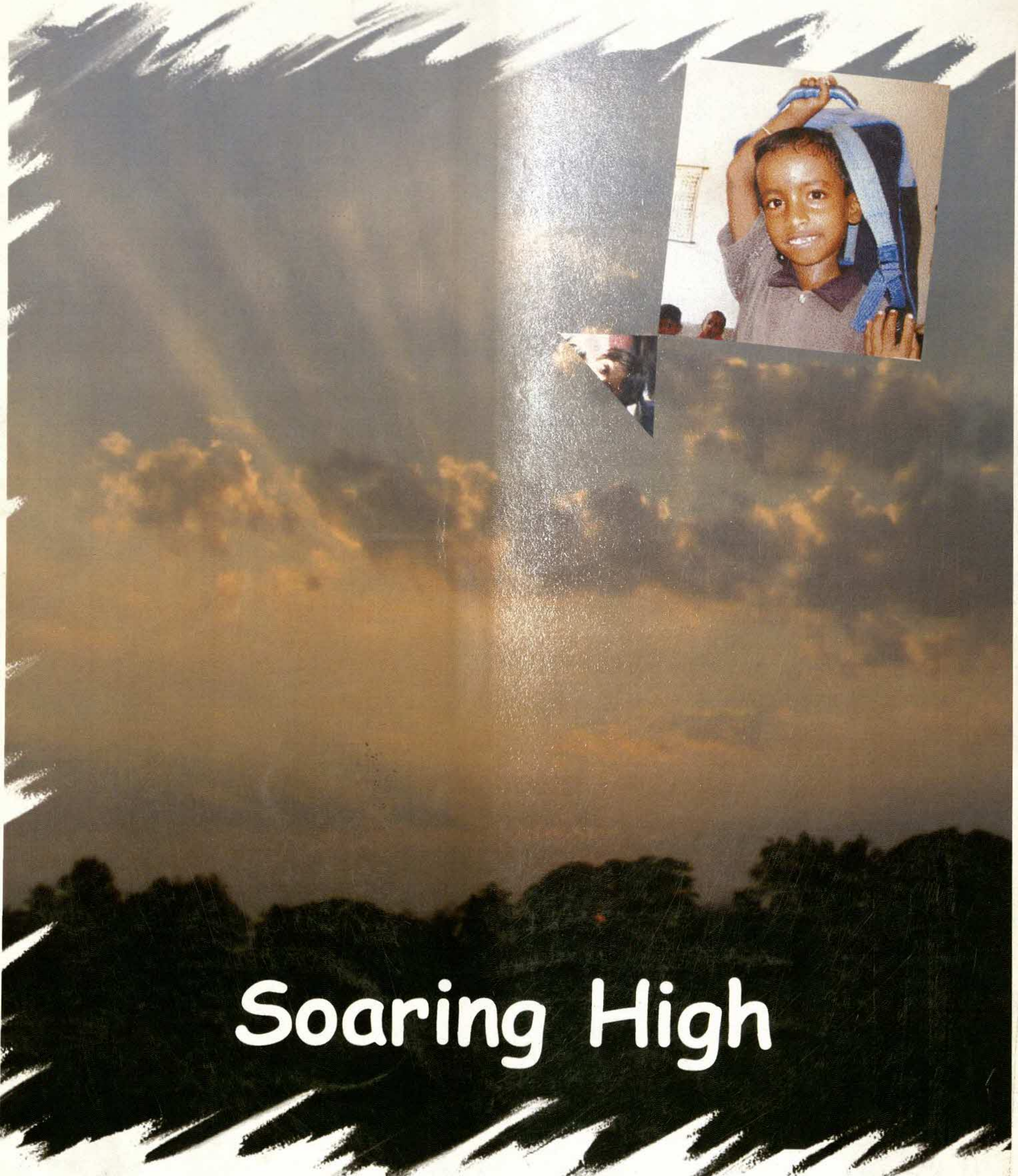
Annexure (iii)

Guideline for analysis of Mulyan Data

Evaluation : Impact Analysis (3rd Term Evaluation)

Standard-I, Bengali (First Language)	
Competency	Total number given
C1: Barnastar	6
C2: Sabdastar	8
C3: Bakyastar	8
C4: Bodhagamyata	3
Standard-I , Ganit (Arithmetic)	
C1: Kam-Beshir Dharana	2
C2: Sankhyar Dharana	3
C3: Sthaniya maner Dharana	2
C4: Joger Dharana saha Bastab samasyar samadhan	7
C5: Bioger Dharana saha Bastab samasyar samadhan	8
C6: Taka-paisa, din-ghanta o shunyer Dharana	3
Standard-II, Bengali (First Language)	
C1: Barnastar	5
C2: Sabdastar	11
C3: Bakyastar	3
C4: Bodhagamyata	6
Standard-II, Ganit (Arithmetic)	
C1: Sankhyar dharana	4
C2: Sthaniya maner dharana	3
C3: Joger Dharana saha Bastab samasyar samadhan	5
C4: Bioger Dharana saha Bastab samasyar samadhan	5
C5: Gun o bhager dharana saha Bastab samasyar samadhan	6
C6: : Taka-paisa, din-batsar o parimaper Dharana	2

Library


Soaring High